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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/544,898	09/12/2005	Matti Hietaniemi	METSO-45	6479
36528	7590	01/29/2008		
STIENNON & STIENNON 612 W. MAIN ST., SUITE 201 P.O. BOX 1667 MADISON, WI 53701-1667			EXAMINER HUG, ERIC J	
			ART UNIT	PAPER NUMBER
			1791	
			MAIL DATE	DELIVERY MODE
			01/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/544,898	<b>Applicant(s)</b> HIETANIEMI, MATTI	
	<b>Examiner</b> Eric Hug	<b>Art Unit</b> 1791	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 20-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-26 and 31-39 is/are rejected.
- 7) ☒ Claim(s) 27-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-26 and 31-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hautala et al (US 6,267,845).

Hautala discloses arrangements for the short circulation in a paper machine including stock chests for different component stocks  $M_i$  ( $M_1, M_2, M_3, \dots, M_N$ ), cleaners, a deaeration tank, a dilution headbox, a wire section, and white water. Each component stock  $M_i$  is metered from a respective stock chest  $20_i$  into a main line of the process where they are mixed together with a flow of dilution water. The component stocks can be, for example, pulp of long fibers, short fibers, broke, mechanical pulp, or chemical pulp. Pump 110 in the main line feeds the mixed and diluted stock through a screen 115, then through a centrifugal cleaner 120, then to the suction side of a second pump 130. The second pump 130 feeds the stock through the machine screen 140 into the headbox 150. White water is recovered from the wire section 160 and used for dilution of the stock in the main line. A plurality of feed pumps  $110_i$ , screens  $115_i$ , machine screens  $140_i$ , and centrifugal cleaners  $120_i$  can be used for the component stocks. See Figures Hautala discloses in column 10, lines 42-50, that screens and centrifugal cleaners can be omitted in situations in which the component stocks  $M_i$  have already been cleaned to a sufficiently high

level of purity before the stock chests 20<sub>i</sub>. Only the feed pumps 130<sub>i</sub> would be needed. This would imply that centrifugal cleaning of any one or more of the stock components can be omitted. This would also imply that centrifugal cleaning of any one or more of the stock components can be performed. In such instances where centrifugal cleaning is required for fewer than all of the stock components, it would be obvious to one skilled in the art to combine the stock streams only after each are sufficiently cleaned. Therefore, because Hautala suggests combining an accepts of one or more stock components from a hydrocyclone plant with one or more previously cleaned stock components, the claims are unpatentable.

The arrangement of the short circulation, headbox, the stock chests, and hydrocyclone plant under the circumstances given above reads on the apparatus of claim 20. The way by which stocks are handled in the above arrangement reads on the methods of claims 31, 32 and 37.

Regarding claims 21, 22, 24, 33, 34, and 38, the claimed types of stocks are disclosed by Hautala, and are suitable for either of the chests.

Regarding claims 23 and 35, because at least one stock component has been already cleaned, it would be obvious that hydrocyclones were used.

Regarding claims 24 and 36, the claimed types of stocks are disclosed by Hautala.

Regarding claims 25 and 26, the arrangement of wire pit, deaeration tank, wire water supply, machine screen, dilution water inlet header, and pumps are identically disclosed in the Figures.

Regarding claim 39, stock to be cleaned in a hydrocyclone is diluted to consistency of about 1 percent with wire water before the cleaning. See column 6, lines 55-67.

*Allowable Subject Matter*

Claims 27-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The claims are allowable for further providing at least one mixing device as arranged.

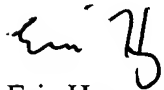
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hautala et al (WO 2004/067838) discloses a system for handling coated broke in conjunction with a short circulation loop of a paper machine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 571 272-1192.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Eric Hug  
Primary Examiner